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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/596,548

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Matthias Maase

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EXAMINER

COPPINS, JANET L

ART UNIT

PAPER NUMBER

1626

MAIL DATE

DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/596,548	Applicant(s) MAASE ET AL.	
	Examiner JANET L. COPPINS	Art Unit 1626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 16 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>6/16/06</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-20 are currently pending in the instant application.

Priority

2. The instant application is a 371 of PCT/EP2004/014386, filed December 17, 2004.

Information Disclosure Statement

3. Applicants' Information Disclosure Statement (IDS), submitted June 16, 2006, has been considered by the Examiner. Please refer to the signed copy of Applicants' PTO-1449 form, submitted herewith.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicants recite a method of “separating acids from reaction mixtures,” by employing an alkyimidazole base, however the claims fail to define any reactants or products in said method. As set forth in MPEP 2171, “the claims must particularly point out and distinctly define the metes and bounds of the subject matter that will be protected by the patent grant.” Therefore, a claim directed to a process must set forth starting materials as well as an end product(s), which Applicants have failed to define. In steps a) through f) of Claim 1, Applicants merely refer to “at least one acid,” rather than defining specific acids employed (or *types* of acids employed); and “a desired product” rather than defining said product or type(s) of said end product; as well as “at least one base,” and the “reaction product” of said “base” and “acid.”

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One skilled in the art would not know which starting materials (i.e. "acids" to employ), or reagents to add, (i.e. "bases"), to obtain which end product, (i.e. "desired product").

The argument that said "acids," "bases," and "desired product(s)" employed are all "dependent upon the desired reaction product of one skilled in the art," is insufficient support for reciting the process as claimed. Therefore, the scope of the claim would not be clear to one of ordinary skill in the art (see MPEP 2173). The Examiner suggests defining said acids and bases, or the desired products, or the type of reaction conducted.

Double Patenting

6. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

7. Claims 1-20 are rejected on the grounds of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 3 and 5-13 of U.S. Patent No. 7,351,339.

Although the conflicting claims are not identical, they are not patentably distinct from each other because the '339 patent recites:

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Conducting a reaction, wherein an acid and a "product of value" are mixed, and wherein an auxiliary base is present during the reaction or is added to the reaction mixture following the reaction, and wherein the auxiliary base **combines with the acid to form a salt** which is liquid, followed by removal of the liquid salt, wherein said salt forms two immiscible liquid phases, one phase containing the salt of the auxiliary base and the other phase containing the "product of value," and then separating the two immiscible phases from each other, and wherein the auxiliary base is selected from a group of nitrogen-containing heteroaryls, including alkyl-imidazoles. Therefore it would have been obvious to employ the acids disclosed in the '339 patent with the auxiliary bases taught (specifically alkylimidazole) to form a salt, separating the salt into two separate phases, adding a base and then separating the mixture, modifying the weight percentages and reaction parameters as per *In re Boesch*, 205 USPQ 215 (1980), that the optimization of variables, such as pH and molar ratios, in a known process is prima facie obvious. Therefore, the claimed process would have been suggested to one skilled in the art.

8. Claims 1-20 provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 17, 18, 20, 22 and 24 of copending Application No. 10/500,145. Although the conflicting claims are not identical, they are not patentably distinct from each other because the '145 application recites:

A process for synthesizing a phosphorous compound, wherein an auxiliary base combines with an acid to form a salt which is liquid, followed by removal of the liquid salt, wherein said salt forms two immiscible liquid phases, one phase containing the salt of the auxiliary base and the other phase containing the phosphorous compound, and then separating the two immiscible phases from each other, and wherein the auxiliary base is selected from a group of nitrogen-

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containing heteroaryls, including alkyl-imidazoles. Therefore it would have been obvious to employ the acids disclosed in the '145 application with the auxiliary bases taught (specifically alkylimidazole) to form a salt, separating the salt into two separate phases, adding a base and then separating the mixture, modifying the weight percentages and reaction parameters as per *In re Boesch*, 205 USPQ 215 (1980), that the optimization of variables, such as pH and molar ratios, in a known process is prima facie obvious. Therefore, the claimed process would have been suggested to one skilled in the art, particularly since Applicants have not defined or limited an end-product, such that any compound would read on the instantly claimed "desired product."

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Conclusion

9. In conclusion, claims 1-20 are pending in the application, and all claims stand rejected.

Telephone Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JANET L. COPPINS whose telephone number is (571)272-0680. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph K. McKane can be reached on 571.272.0699. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/REI-TSANG SHIAO /

Janet L. Coppins
Patent Examiner, Art Unit 1626
June 20, 2009

REI-TSANG SHIAO
Primary Examiner, Art Unit 1626